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U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
Division of Forest Insect Investigations

FOREST INSECT CONDITIONS
COBB MOUNTAIN INFESTATION AREA
MIDDLETOWN RANGER DISTRICT, STATE DIVISION OF FORESTRY
DECEMBER 1953
RECONNAISSANCE SURVEY

Introduction

On December 7, 1953, R. C. Hall from the Forest Insect Laboratory, accompanied George Grogan, Forest Technician, from the Santa Rosa District Office of the California State Division of Forestry in an inspection of insect damage in the Cobb Mountain Recreational Area in Lake County. From the inspection it appeared that losses due to insects, in ponderosa pine in this area, were generally light, but there was evidence of some group killing in local areas. For this reason a further appraisal of the area seemed advisable. On December 21 and 22, therefore, a reconnaissance of the Cobb Mountain Infestation Area was made by G. L. Downing to determine the present status of insect populations within the area.

The Cobb Mountain Infestation Area is characterized by scattered broken timber, with many resorts and a few farms intermingled throughout. The land is for the most part fairly gentle with a few steep slopes. Most of the area is accessible to logging and a good share of it has been logged over.

Host and Insect Species

The majority of the stand is composed of ponderosa pine and Douglas fir with incense cedar, white fir, sugar pine, digger pine and knobcone pine making up the remainder of the coniferous type. This is for the most part an all-age stand.

Insect activity during 1953 has been concentrated in the ponderosa pine element of the stand, where the presence of fresh logging slash has favored development high populations of pine engravers (Ips spp.) and the western pine beetle (Dendroctonus brevicomis Lec.).

Status and Scope of Infestation

In practically all areas visited, where current tree mortality was noted, there is recent logging slash which has not been properly lopped and scattered. The slash consists of long tops, which with few exceptions have been left in the woods without the limbs having been lopped off. Other types of slash have been left where they fell in the woods operation (Fig. 1). Such material offers optimum conditions for pine engraver development, and apparently accounts for the concentration of pine engraver damage that have occurred in areas logged within the past year.

Further evidence of engraver activity is revealed by the presence of numerous dead and dying tree tops; however, engraver damage to standing trees has

been light to moderate in spite of the overabundance of very favorable breeding material. It is estimated that between 100 and 150 topkilled trees are present in the area currently. In many of the trees that have been topkilled by engravers, the remaining green portion of the trunk has become infested by western pine beetle. Attacks by this beetle, of course, usually result in the death of the tree. It is estimated that an additional 100 to 150 trees have been killed by a combination of engraver and western pine beetle attacks, which makes a total of 200-300 trees recently or currently under attack. Once western pine beetle populations breed up in weakened trees, it does not necessarily follow that they will move only into other weakened trees. They are quite likely to attack and kill healthy, green trees, and this to some extent has been the case in the Cobb Mountain area.

Recommendations

The application of direct control measures is not the proper solution to this problem, and is not recommended. A program of preventive control should be adapted which will eliminate the type of slash favorable for the development of pine engraver broods. The following action is advocated:

1. Encourage all logging operators to properly lop and scatter all logging slash.

2. Encourage all land owners to treat all slash from road clearing or land clearing in such a manner that it will dry out rapidly.

3. Maintain a close check on the infestation area to ascertain whether or not the current insect populations are increasing or decreasing, particularly during this coming spring and summer.

Berkeley, California
January 15, 1954

G. L. Downing
Entomologist